Page 1 of 5

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RAW SEQUENCE LISTING DATE: 12/17/2001 PATENT APPLICATION: US/09/847,392 TIME: 12:05:26

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3 <110> APPLICANT: LIVSHITS, VITALY ARKADIEVICH
         ZAKATAEVA, NATALYA PAVLOVNA
 5
         ALCOSHIN, VLADIMIR VENYAMIOVICH
         BELAREOVA, ALL VALENTINOVNA
 6
         TOKHMAKOVA, IRINA LVOVNA
   <120> TITLE OF INVENTION: DNA CODING FOR PROTEIN WHICH CONFERS ON BACTERIUM
 9
         ESCHERICHIA COLI RESISTANCE TO LO-HOMOSERINE AND METHOD
10
         FOR PRODUCING L-AMINO ACIDS
13 <130> FILE REFERENCE: 0010-1039-0
15 <140> CURRENT APPLICATION NUMBER: 09/847,392
16 <141> CURRENT FILING DATE: 2001-05-03
18 <150> PRIOR APPLICATION NUMBER: 09/396,357
19 <151> PRIOR FILING DATE: 1999-09-15
                                                            ENTERED
21 <150> PRIOR APPLICATION NUMBER: RU98118425
22 <151> PRIOR FILING DATE: 1998-10-13
24 <160> NUMBER OF SEQ ID NOS: \langle 2 \rangle
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29 <211> LENGTH: 1200
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31 <213> ORGANISM: Escherichia coli
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35 <222> LOCATION: (557)..(1171)
37 <400> SEQUENCE: 1
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42 cgattaacat gcccgagatg cggatcggct aacaggcgac cggaacgtcc ctgcccgcga 180
44 tggtcgatga ttaagacatc aaaccccaaa tggaacaggt cataggccag ttccgcatat 240
46 tttacgtage teteaatacg eeeegggeag atgactacea eeeggteatg gtgetgtgeg 300
48 cqaaaacqqa caaagcgcac cggaatgtca tccacaccag taaactctgc ttcatcacgc 360
50 tqacqccaga aatcagtcag cggtcccatg gtaaaagcag caaacgcgtt ttctcttgtt 420
52 teccaqtett tttgetgetg aaacateggg taatetgeet ettaaaceae gtaaaategt 480
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57
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61 Ser Ile Ile Leu Thr Leu Ser Pro Gly Ser Gly Ala Ile Asn Thr Met
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64 acc acc tcg ctc aac cac ggt tat ccg gcc ggt ggc gtc tat tgc tgg
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65 Thr Thr Ser Leu Asn His Gly Tyr Pro Ala Gly Gly Val Tyr Cys Trp
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68 gct tca gac cgg act ggc gat tca tat tgt gct ggt tgg cgt ggg gtt
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69 Ala Ser Asp Arg Thr Gly Asp Ser Tyr Cys Ala Gly Trp Arg Gly Val
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72 ggg acg cta ttt tcc cgc tca gtg att gcg ttt gaa gtg ttg aag tgg
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74	_				65					70					75		
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78				80					85					90			
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	Ala	Gly		Ile	Asp	Leu	Lys		Leu	Ala	Ser	Thr		Ser	Arg	Arg	
82			95					100					105				000
	cat																928
	His		Phe	GIn	Arg	Ala		Phe	vaı	Asn	Leu		Asn	Pro	ьуs	ser	
86		110					115					120	a + ~		a aa	~~~	076
	att																976
	Ile	vaı	Pne	Leu	Ата		Leu	Pne	Pro	GIII		TTE	Met	PIO	GIII	140	
	125		a+ a	~ + ~	~~~	130	2 + 4	~+ ~	ata	aaa	135	3.00	20+	5 ++	αtα		1024
	ccg Pro																1024
	PIO	GŤII	Leu	Met	145	тут	TTE	Val	ьец	150	vaı	T 111T	TIIT	116	155	Val	
94	gat	a++	2++	ata		ato	aat	tac	acc		ctt	act	саа	caa		act	1072
	Asp																1072
98	кър	TTE	TIE	160	мес	TIE	СТУ	тут	165	TIIT	пец	AIU	OIII	170	110	71.4	
) cta	tac	ratt		a a a	cca	aao	rcac		r aac	r acc	r ete	raat		r ati	t ttc	1120
101 Leu Trp Ile Lys Gly Pro Lys Gln Met Lys Ala Leu Asn Lys Ile Phe 102 175 180 185																	
		tee			ato	r ct.a	ato			cto	r tta	a des			ı aq	g cat	1168
																J His	
106		190					195					200			-	•	
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	Ala	_		-		,,	,	, , ,									
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120					5					10					15		
		Leu	ı Sei			Ser	Gly	Ala			Thi	Met	. Thr			r Leu	
123			_	20					25		_	_		30		_	
		His			Pro) Ala	Gly			Туг	CAS	Trp			Asp	Arg	
126			35		_	_		40			- 01-		45			. Dha	
		_	_	Ser	туг	. Cys			Trp	Arg	GTA			THI	. те	ı Phe	
129		50		1	71 .	1 -	55		. 17. 1	T 0.		60 		C11	. al-	. 7.1.5	
			ser	vai	. 116			: GIU	l Val	. Leu			ALC	. Сту	Alc	a Ala 80	
132			. т1-	. m	т	70		. c1-	C1-	, Trans	75		. λ1≂	G1 v	, 2,7 -		
		ьeu	тте	: Trp	ь Leu 85		тте	: GTI	ı GII.	90		l WIG	MIG	. оту	95	a Ile	
135		T 0	T ***				Car	ጥ ከ *	. 61-			r Δro	Hic	. T.en		e Gln	
138	_	пeп	י בער	100		. лта	PET	¥111	105			,9	1115	110		_	
		Δla	V ≥ 1			Δen	T.011	Thr			Tare	Ser	· T1c			e Leu	
- - 0	9	nua	· vul				u				-1-						

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141			115					120					125			
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146	Gln	Tyr	Ile	Val	Leu	Gly	Val	Thr	Thr	Ile	Val	Val	Asp	Ile	Ile	Val
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VERIFICATION SUMMARY

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